

SCAMMON BAY HEALTH CLINIC



Alaska Rural Primary Care Facility Code and Condition Survey

Final
July 23, 2001



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I. Executive Summary

Overview:

The Scammon Bay Clinic, built in 1987, is 30' x 40' building with corners cut out and one vestibule for a total of 1058 SF. It is one of the smaller freestanding clinics in the entire YKHC program area. It has a waiting room/circulation hall, one exam/trauma room, one exam room, two toilet rooms, janitor/boiler/storage room, office, and small storage area. It has a front entry with vestibule, stair, and ramp, and rear entry with no vestibule and stair. The simple wood frame construction on a 6 x 6 treated wood post and pad system directly on the silty, sandy, dirt site is similar to many clinics constructed in the YKHC region over the last 20-30 years. It has been modified due to heating problems with all exposed internal piping, and is in poor condition and the one of the smaller for the current size of the village, 465 residents. It should be recognized that the community has grown over 35% in the last 10 years and in the next 2-3 years, at current growth rates, will exceed the 500 resident level that requires a large clinic. The community is made up of young families.

Renovation/Upgrade and Addition:

The existing Clinic will require a 940 SF addition to accommodate the current need and Alaska Rural Primary Care Facility space guidelines. This addition would require some reconfiguration of the site and additional new fill and pad work. There would also need to be major renovation and upgrade of the existing clinic. As can be seen from the documentation enclosed, the existing clinic will require major renovation to meet current code and standards as well. The cost of renovation and addition will far exceed the cost of a new clinic facility.

New Clinic:

The city has provided a new site, adjacent to the new post office, community store, and central to the community other city facilities. It is available immediately for a new clinic. The community has proposed that a new larger 2000 SF Denali Commission Medium Clinic can be constructed on the new site. We have included preliminary site plan for this site and a new 2000 SF clinic. Please note that a 2500 SF clinic could also be accommodated on this site easily.

The proposed site has all existing utilities and is in easy access to the entire community and other community related facilities

The community has completely supported this effort and have met extensively to assist in new site issues and to resolve any site considerations of the site presented.

II. General Information

A. The Purpose of the Report and Assessment Process:

ANTHC has entered into a cooperative agreement with the Denali Commission to provide management of the small clinic program under the Alaska Rural Primary Care Facility assessment, planning, design and construction. Over 200 clinics will be inspected through the course of the program. The purpose of the Code and Condition survey report is to validate the data provided by the community in the Alaska Rural Primary Care Facility Needs Assessment and to provide each community with a uniform standard of evaluation for comparison with other communities to determine the relative need between the communities of Alaska for funding assistance for the construction of new or remodeled clinic facilities. The information provided in this report is one component of the scoring for the small clinic RFP that the Denali Commission sent to communities in priority Groups 1 and 2. The information gathered will be tabulated and analyzed according to a set of fixed criteria that should yield a priority list for funding. Additionally, the relative costs of new construction vs. remodel/addition will be evaluated to determine the most efficient means to bring the clinics up to a uniform standard of program and construction quality.

A team of professional Architects and Engineers traveled to the site and completed a detailed Field Report that was reviewed by all parties. Subsequently, the team completed a draft and then final report of the facility condition.

B. Assessment Team:

Tom Humphrey, Capital Projects Director, and Senka Paul, the administrator for Yukon Kuskokwim Health Corporation organized the assessment team. The team for this site visit was Senka Paul, YKHC; Gerald L. (Jerry) Winchester, Architect, Winchester Alaska, Inc.; Bob Jernstrom, PE, Jernstrom Engineering, and Matt Dixon, ANTHC. Team members who assisted in preparation of report from information gathered included members of the field team above and Ben Oien PE, Structural Engineer; Eric Cowling, PE, Electrical Engineer; Carl Bassler PE, Civil Engineer; and Estimation Inc.

C. Report Format:

The format adopted is a modified "Deep Look" format, a facilities investigation and condition report used by both ANTHC and the Public Health Service, in maintaining an ongoing database of facilities throughout the country. Facilities are evaluated with respect to the requirements of the governing building codes and design guidelines. Building code compliance, general facility condition, and program needs have been evaluated. The written report includes a floor plan of the clinic, site plan as available, and new plans for renovation/upgrade or completely new clinics. Additional information was gathered during the field visit which includes a detailed Field Report and building condition checklist, sketches of building construction details, investigations of potential sites for new or replacement clinics, and proposed plans for village utility upgrades. This information is available for viewing at ANTHC's Anchorage offices and will be held for reference.

D. The Site Investigation:

On June 27, 2001, the team flew to the site and made observations, took photos, and discussed the needs with on-site personnel for the facility. Approximately two hours was spent on site, with sufficient time to investigate foundations, structure, condition, mechanical and electrical systems, and to interview the staff to assess current and projected health care needs. Though this was a compressed time frame on site due to weather, the team was well rehearsed in collecting the data and was able to get all needed information.

Interviews were conducted with the Betty George, Health Aide, and other city residents, including tribal administrator Pearlle Amokom, and Peter George. The city and tribal staff provided information on the existing building, site, and utilities. Additional review of existing data from YKHC files from physician's assistants, community health aides, travel clerks, dentists, specialty clinic providers, and medivac teams. These interviews provided clear understanding of the needs of the village, the clinic facility, and the users of the facility.

The Scammon Bay community has reviewed the use of a Denali Commission Medium Health Clinic design adapted to the Scammon Bay Site. The site is secured adjacent to the new post office and community store and other city facilities.

II. Clinic Inspection Summary

A. Community Information:

Population: 465 (2000 Census)

2nd class City, Unorganized Borough, Lower Yukon School District, Calista Corporation

Location:

Scammon Bay is on the south bank of the Kun River, one mile from the Bering Sea. It lies to the north of the 2,300-foot Askinuk Mountains on the Yukon-Kuskokwim Delta. It lays at approximately 61d 50m N Latitude, 165d 35m W Longitude (Sec. 10, T020N, R090W, Seward Meridian). The community is located in the Bethel Recording District. The area encompasses 1 sq. miles of land and 0 sq. miles of water.

History:

It was known in Eskimo as "Mariak," and its residents were called "Mariagamiut." The nearby Bay was named after Capt. Charles Scammon, who served as the marine chief of the Western Union Telegraph Expedition from 1856 to 67. The name came into use when the Scammon Bay post office was established in 1951. The City government was incorporated in 1967.

Culture:

Scammon Bay is a Yup'ik Eskimo community that relies on fishing and subsistence activities. Most residents travel to the Black River each summer for fish camp, 50 miles to the north. The sale, importation or possession of alcohol is banned in the village.

Economy:

Employment is focused on commercial fishing. Firefighting for BLM, construction projects and handicrafts also provide seasonal income. 48 residents hold commercial fishing permits. Subsistence activities provide fish, beluga whale, walrus, seal, birds and berries. Poor fish returns in the past two years have significantly affected the community.

Facilities:

Water is derived from an infiltration gallery located on a small stream south of the City, is treated and stored in a 100,000-gal. tank. Nearly all homes and the school are connected to the piped water and sewer system and are plumbed. Only a few residents use honeybuckets, typically due to frozen pipe damage. There is no washeteria. A new landfill and access road were recently

completed, but funds are needed for equipment. AVEC and the City are interested in developing a small hydroelectric plant.

Transportation:

Scammon Bay is accessible by air and water. A State-owned 3,000' gravel airstrip and City-owned seaplane base on the Kun River serve air traffic. Barges bring in bulk supplies each summer. Winter trails connect Scammon Bay with Hooper Bay. Snowmachines and skiffs are the primary means of local transportation.

Climate:

The area's climate is maritime. Temperatures range between -25 and 79. Annual precipitation is 14 inches, with 65 inches of snowfall. Severe easterly winds during the fall and winter limit access

B. General Clinic Information:

Physical Plant Information:

The existing Scammon Bay Clinic was completed in 1987 and occupies 1058 sq. ft. (See attached Plan) It should be noted that the size of the clinic has always be stated to be 1200 SF, however, it is smaller that previously reported. It is one of the smaller size clinics constructed during the last twenty years in the YKHC program area. It has a combined waiting and circulation hall that is in the center of the facility. There is an exam/trauma room immediately to the left as you enter the facility and a second smaller exam room just beyond. There are two toilet rooms, janitor/boiler/storage/supply room, office, and a small storage room. It has a main front entry with large vestibule and 4' doors. This is the only older facility we have seen with large doors for gurney access. The front stairs are code compliant, however, they are in need of some repairs and adjustment to meet code. The secondary exit from the waiting room has no vestibule and has only a compliant stair that needs some minor upgrades. The office is small and storage is very minimal. None of the sinks or fixtures are ADA compliant. There is no a bath. The janitor sink is in the boiler room and is very difficult to use. The doors on the rooms do not have ADA compliant hardware.

Clinic program usage information:

Patient records indicate the clinic sees an average of 512 patients per month in 2000, and 267 patients per month in 1999 and in 1998. This is an over a 90% increase in patient encounters in the last two years. There are 3 full or part time staff and 1 Itinerant or contract staff equivalent. The office space provided is not adequate and all the office functions, travel, files, and use by all health aides is accomplished in the single office area. There are only two exam rooms, and the to see patients. When itinerant providers are in the facility it is very crowded. The remainder of the facility is packed full of medical items, office, and small circulation. Storage is completely inadequate; basically only one patient can be seen at a time.

C. Program Deficiency Narrative:

1. Space Requirements and Deficiencies:

Space Comparison Matrix - Current Scammon Bay Actual SF to Denali Commission Medium Clinic

Alaska Rural Primary Care Facility

Purpose / Activity	Current Clinic						Medium clinic					
	Designated Itinerant			Actual Net SF			ARPCF SF			Difference		
	Size	No.	Net Area (SF)		No.	Net Area (SF)	Size	No.	Net Area (SF)	Size	No.	Net Area (SF)
Arctic Entries				54	1	54	50	2	100			46
Waiting/Recep/Closet	150	1	150	68	1	68	150	1	150			82
Trauma/Telemed/Exam	200	1	200	184	1	184	200	1	200			16
Office/Exam				124	1	124	150	1	150			26
Admin./Records				150	1	150	110	1	110			-40
Pharmacy/Lab							0	80	1	80		80
Portable X-ray							0		0			0
Specialty Clinic/Health Ed/Conf							0	150	1	150		150
Patient Holding/ Sleeping Room							0	80	1	80		80
Storage	150	1	150	25	1	25	100	1	100			75
HC Toilet				54	54	2	108	60	2	120		12
Janitor's Closet							0	30	1	30		30
Subtotal Net Area			500			713			1270			557
Circulation & Net/Gross Conv. @ 45%						296			572			276
Subtotal (GSF)						1009			1842			833
Mechanical Space @ 8%				49	1	49			147			98
Total Heated Space			500			1058			1989			931
			0									
Morgue (unheated enclosed space)							30	1	30			30
Ext. Ramps, Stairs, Loading			HC Accessible			As Required			As Required			As Required

- Overall space deficiencies: The size of the facility is about 940 SF short of the ARPCF space requirements. Based on the YKHC efficiently designed facility to meet ARPCF requirements, the existing facility is still just under 800 sf short of the needed space.
- Specific room deficiencies: There is one vestibule, minimal exam room space, inadequate office space, and no itinerant sleeping area, no bath facility, very minimal storage. These deficiencies in combination with other small spaces leave the clinic very program deficient.
- Other size issues: The mechanical room is very tight, combined with janitor closet, it is not adequate. There are no unheated or exterior storage areas.

2. Building Issues:

- Arctic Entries - The main entry is accessible for ADA and it is possible to get a gurney into the room. It has a legal ramp and door width to provide accessibility. The rear entry has a stair and compliant railings. The main issue is providing pads at the bottom of stairs and ramps for proper height, jacking stairs and leveling, and removing dangerous obstacles such as the water line that cuts in the path of the main stair egress at grade.
- Waiting / Reception –The waiting area contains three-four chairs and is used as the main circulation hall. All rooms access from this room and hall making it difficult to have a

waiting area that is not in the middle of all circulation of staff. Many other items are stored in the space. Patient use is restricted to one end.

- c. Exam / Trauma – There is one exam/trauma room available. The room though sized adequately is full of other clinic equipment and storage items. It is accessible for gurney with a large solid core door but does not have ADA hardware. Privacy is somewhat difficult since all the exam rooms open to the main waiting/circulation hall.
- d. Exam room – There is one smaller exam room with adequate space for normal operation. Like the trauma room the exam room has considerable additional storage of items due to the lack of storage in the facility. Additionally the sink is not to code and sanitary conditions. It has a plywood cabinet, and no ADA access.
- e. Office / Administration / Records – This room has a two desks, copier, fax, a single patient chair, and considerable storage. There is a sliding glass window to the waiting room that does not provide adequate privacy for patient interviews and phone calls. This room is not large enough for an office and when a patient is also in the room it is very tight. The electrical service is totally inadequate for this room and the facility.
- f. Pharmacy / Lab – There is no Pharmacy and medicines are stored in locked cabinets in exam rooms.
- g. Specialty Clinic / Health Education / Conference - This function is completed in the second exam room and makes any other medical delivery very difficult with only the one other room available.
- h. Patient Holding / Sleeping Room – There is no sleeping room and only a rollaway bed for itinerant staff.
- i. Storage – Storage is adequate and is contained in the storage in the rear of the office area, in the exam rooms, and in the janitor/boiler room. It is very dysfunctional due to location, lack of shelving and storage systems.
- j. HC Toilet Facilities – There are two toilet rooms, one serves patients and the other clinic staff. Neither toilet room meets any of the ADA or UPC requirements. The toilet and sink lacked sufficient clearances and were of incorrect fixture type. There is no vacuum breaker on this sink as required by code. There is no tub. All these areas are very unsanitary due to deteriorating floor system and wall joints from structural shifting.
- k. Janitors Room – There is a room that has a janitor's sink that also is the boiler room, and other equipment items. It is very crowded.
- l. Mechanical/Boiler room – The Mechanical room or Boiler room is also the janitor room above and storage room. This is a very unsafe condition and does not meet code. There is no full 1 hr. separation due to hole in walls.
- m. Ancillary Rooms – There are no ancillary rooms as all space is used to maximum capacity including storage rooms, exam rooms, toilet rooms, office, waiting room, corridors, and vestibules.

3. Functional Design Issues

This facility is functionally inadequate for its current intended use. The spaces do not meet the functional size requirement, sanitation and patient care are very poor due to material failures, and there is need for more space to meet delivery needs. The ability to perform required medical functions within the facility is severely hampered by lack of storage, and not adequate sinks.

4. Health Program Issues

a. Patient comfort and privacy:

The front door of the clinic is through a large vestibule that is adequate to defer the heat loss. The second exit from the waiting area has no vestibule and transmits heat substantially directly to the area where patients are waiting. The waiting room is cold every time the secondary door is opened and the cold air migrates into the clinic where patients are being attended. There is minimal patient privacy since all the doors are open directly onto the waiting / circulation area and the sight lines are not screened.

b. Medical/Infectious Waste

This is being handled in a very basic method and is hampered by the small non-functional facility.

c. Infection Control

This is being completed with minimal long-term control due to lack of facilities. Floor materials are very worn out and replaced with multiple materials and sizes allowing for control problems. There is no rubber base material, and walls and ceiling materials are gypboard that is cracked in numerous places due to building shifting on the foundation. This makes cleaning difficult. There is a janitor sink for general cleaning and sinks in the exam rooms for practitioner use though none of these meet code requirements.

d. Insect and Rodent Control

None noted or investigated

e. Housekeeping

The difficulty in cleaning and housekeeping in such a congested facility is understandable and is being done at the best level currently possible.

5. Utilities

a. Water Supply

The piped system for the entire village from central system is very adequate.

b. Sewage Disposal

Sewer system is provided by gravity piped system to lagoon.

c. Electricity

See Electrical Narrative

d. Telephone

A single phone line services the clinic and is inadequate for current needs.

e. Fuel Oil

The fuel system is not adequate with some leaking having occurred around the existing above ground tank. There is not protection or containment for possible spilling.

D. Architectural / Structural Condition

1. Building Construction:

a. Floor Construction:

The floor is 2 x 12 joist over a 2 x 12 floor beams. The beams are supported with 6 x 6 posts with 3 x 12 pads under the posts. There is R-19 insulation in the floor with 3/8" plywood on the bottom of the joist. . There is extremely abnormal amount of building shifting down hill with some settlement and heaving that has caused doors to stick and floor to be uneven. There is approximately 11 inches of differential in the floor elevations. Some piping has been relocated internal to the room space and utilidors are in very poor shape causing major freezing problems with the facility.

b. Exterior Wall Construction:

The walls are 2 x 6 construction at 24" oc. The sheathing is plywood with horizontal bevel cedar siding painted and R-19 fiberglass batt insulation with vapor barrier gypsum board on the interior.

c. Roof Construction:

The roof is a full-span truss at 24" oc with plywood deck and metal roof. The insulation is approximately 12" or R-38 of batt insulation that is minimal in this climate. The fully hipped roof on all sides prevents easy gable venting and there is no attic ventilation.

d. Exterior Doors:

The exterior doors are commercial insulated hollow metal. They are in good shape and need painting and adjustment to operate properly.

e. Exterior Windows:

Windows are of thermo-pane wood casement windows and do not all open.

f. Exterior Decks, Stairs, and Ramps

The main Arctic entry is adequate and the secondary exit needs a vestibule. The landing, stairs, railings do meet current codes. The stairs and ramps need pads at the base and adjustment for sloping and settlement.

2. Interior Construction:

a. Flooring:

The flooring is Vinyl tile over plywood. It has been replaced in many areas and is seriously deteriorated in most areas. Duct tape has been used to patch the flooring that is worn out and covered with duct-tape in other areas. Entire replacement of sub-floor and finish is required to meet sanitary requirements.

b. Walls:

The walls are of 2x4 wood construction, with no sound insulation. The type of wall construction does provide for minimal patient privacy, however, replacement with sound walls is recommended to meet current standards. There are many cracks in wall system due to settlement and shifting building.

c. Ceilings:

The ceilings are gypsum wallboard and needing repair. The ceiling is not easily washed and presents a serious sanitation issue.

d. Interior doors:

The interior doors are solid core wood and provide reasonable sound isolation and need adjustment due to floor shifting to close properly. They are not ADA accessible and the hardware does not meet ADA requirement.

e. Casework:

The upper casework is non-existent and the lower casework is of very poor construction. Tops are of plywood and do not fit to walls and are seriously deteriorating. The sanitary issues are very significant with the counters being of such poor construction. Need full replacement.

f. Furnishings:

The furnishings are very old and worn. There are three chairs in the waiting room patched with duct tape and a variety of mismatched and old desks, chairs, and tables for other use. The exam tables are older as well.

g. Insulation:

Floor Insulation		R-19
Wall Insulation	R-19	
Attic/Roof Insulation		R-38
Attic Ventilation		Gable Vents only

h. Tightness of Construction:

The facility is of generally OK overall construction, however, due to substantial building settlement and shifting there are numerous leaks in construction system at doors, floor, roof, and sills.

i. Arctic Design:

The one vestibule is acceptable and second is needed. The orientation is OK, and siting of the clinic is adequate. The site is adequate for normal arctic design.

3. Structural

a. Foundations

The foundation is treated 6 x 6 posts on 3 x 12 pads for support. Pads have settled substantially, walls are racked, and the building has floor level deviation and has substantial cracking on the interior. There is no hold down strapping in some places due to removal to try and level the facility. The bracing is loose or missing. In general the foundation needs substantial upgrade work for a new useful lifetime or replacement.

b. Walls and Roof:

The walls and metal roof seem in relatively stable and adequate condition.

c. Stairs, Landings, and Ramps

These elements are in good condition and do not need replacement, only adjusting, new pads and upgrade to remove barriers.

E. Mechanical Condition

1. Heating System

a. Fuel Storage and Distribution

The clinic's heating fuel oil storage tank is located adjacent to the building and not a minimum of 5 ft. as required by code. The 300-gallon storage tank does not have the proper venting, piping, or valving as required by code.

b. Boiler

A single residential grade, oil-fired boiler provides heating for the entire clinic. The boiler is in poor shape with missing controls and systems to meet the needs of the Health Clinic. There is severe corrosion on the boiler stack and the vent assembly is in poor condition. There is one combustion air openings for the boiler. There are no additional heaters in the clinic to assist with heating. The boiler room is used for general clinic storage.

c. Heat Distribution System

The piping has been routed in the clinic to avoid freezing and is exposed throughout the facility. Pipe insulation has been added which does not meet flame spread and smoke-developed ratings. The baseboard enclosures are in poor condition. The entire heating system is in need of replacement.

2. Ventilation System

a. System

There is no mechanical ventilation system. Ventilation is by operable windows. The windows do not open easily and as such do not provide effective ventilation.

b. Exhaust Air

Ceiling mounted exhaust fans service the toilet rooms. These fans are not ducted outside, but are ducted into the attic space. One of the fans is not operational.

c. Outside Air

Some of the rooms with operable windows have broken or missing operators so the windows cannot be opened.

3. Plumbing System

a. Water System

The water system plumbing is typical ½" and ¾" copper distribution piping to the clinic exam sinks and toilet fixtures.

b. Sewer System

City sanitary sewer provides the needs of the clinic. The waste under the building freezes due to a lack of a proper insulated enclosure, pipe insulation, and active heat trace on the piping.

c. Fixtures

The toilet room plumbing fixtures are not ADA approved or UPC code compliant for barrier free access. The janitor's sink is not provided with a code required vacuum breaker.

d. Water Heater

The water heater has not been provide with code required dielectric unions on the hot and cold water connections.

F. Electrical Condition

1. Electrical Service

a. The electrical service is an overhead connection to the building with a meter base on the exterior of the building, the main breaker section is sealed by the utility. It is unknown if a main disconnect is located on the exterior of the panel. The feeder cables route to the MDP where a main disconnect is installed. The meter base is Nema 3R.

b. The service is a 200 Amp, 120/240V, 1 Ph, 3 wire.

c. An adjacent building service passes above the clinic roof.

2. Power Distribution

a. The MDP is a 200 Amp Sq. D QO Load Center Cat #QOC2OU Series G1 with 20 poles total of which 8 are spare.

b. The mechanical plate heat exchanger was installed in front of the panelboard violating the required working clearance.

c. Type XHHW #3/0 copper power cables with no ground conductor are routed from the main disconnect to the MDP.

d. The branch circuit wiring is installed in EMT raceway. Several conduits have a redundant ground that from the photographs is assumed to feed the patient care rooms.

3. Grounding System

a. The building has a grounding electrode conductor routing from the meter base to a ground rod. The metallic piping systems are not bonded.

4. Exterior Elements

a. HID exterior light fixtures are installed at the building entries controlled by wall switches.

b. No exterior receptacles are installed.

c. Telephone service enters at a weatherproof protection test block on the exterior of the building.

5. Electrical devices and lighting
 - a. Receptacles are grounding type.
 - b. The lighting is predominately 4 ft fluorescent T12 (2) lamp surface mounted wrap diffuser fixtures. Support rooms are incandescent type A19 lamped fixtures.
 - c. Interior device plates are non-metallic ivory decorative plates.
6. Emergency System
 - a. No emergency egress lighting is installed.
 - b. Illuminated egress signage is provided with no secondary backup power source.
7. Fire Alarm System
 - a. Battery powered smoke detectors were installed to provide partial coverage. No secondary power source was provided.
8. Telecommunication
 - a. A voice telephone system is installed consisting of 4 lines provided by United Utilities.

G. Civil / Utility Condition

1. Location of building
 - a. Patient Access
Located in the relative center of the village for ease of access and seems to work fine. It is off of the main road to the airport that is an advantage.
 - b. Service Access
Road access is provided to front and rear entry. Stair and ramp access are adequate.
 - c. Other Considerations:
The facility is located on a sloping site and is a good location but soils are sandy, silty, dirt and additional gravel should be used to upgrade the foundation.
2. Site Issues
 - a. Drainage
Drainage from the site is adequate. Correction would include putting a new extended pad on the site prior to correcting the post and pad system, shoring of the site, and new gravel to stabilize.
 - b. Snow
There does not appear to be a snow-drifting problem as the facility sits in the open.
3. Proximity of adjacent buildings
There are four city buildings on the site and not adequate room for expansion.
4. Utilities

- a. Water Supply
The city piped water system is very adequate and serves well.
- b. Sewage Disposal
The city piped sewer system to the lagoon is adequate.
- c. Electricity
Power from Village system via overhead wire. See Photos
- d. Telephone
Overhead phone with only one phone connection, requiring fax and phone on same line.

H. Existing Facility Floor Plan (Site Plan if available):

We have attached drawings, as we have been able to identify, find, or create as part of this report. We have endeavored to provide all drawings for all the sites; however, in some cases exact existing site plans were not available. We have provided as indicated below:

- A1.1 Existing Site Plan is attached if available
- A1.2 Existing Facility Floor Plan is attached following.
- A1.3 The Existing typical wall section is attached following as required by the report guidelines.
- A2.1 The Addition to the Existing Facility as required to meet ARPCF Space Guidelines is attached following.
- A3.1 The New Clinic Site plan is attached as proposed based on the community input.
- A3.2 The New Denali Commission Clinic Floor Plan meeting the ARPCF Space Guidelines and proposed for this location is attached.

IV. Deficiency Evaluation

A. Deficiency Codes:

The deficiencies are categorized according to the following deficiency codes to allow the work to be prioritized for funding. The codes are as follows:

- 01 Program Deficiencies:** Based on assessment of the facility's ability to support the stated services that are required to be provided at the site.
- 02 Fire and Life Safety Deficiencies:** Based on the identified areas where the facility is not in compliance with provisions of the state building codes including, UBC, UFC, NFPA 101, UMPC, NEC. These are organized sequentially from Architectural
- 03 General Safety:** Based on items that are not necessarily code items but are conditions that are considered un-safe by common design and building practices.
- 04 Environmental Compliance:** Based on non-conformance with DEC regulations, hazardous materials and general sanitation.
- 05 Program Deficiencies:** These are items that are required for delivery of the medical services model currently accepted for rural Alaska. This may include space requirements, functional needs, or other items to meet the delivery of quality medical services.
- 06 Unmet Supportable Space Needs:** These are items that are required to meet the program delivery of the clinic and may not be show or delineated in the Alaska Primary Care Facility Space Guidelines.
- 07 Disability Access Deficiencies:** Items not in compliance with the Americans with Disabilities Act.
- 08 Energy Conservation:** These are items that are required for energy conservation and good energy management.
- 09 Plant Management:** This category is for items that are required for easy and cost efficient management and maintenance of the Physical Plant.
- 10 Architectural M & R:** Items affecting the architectural integrity of the facility, materials used, insulation, vapor retarder, attic and crawlspace ventilation, and general condition of interiors, and prevention of deterioration of structure and systems.
- 11 Structural M & R:** Deficiencies and items affecting the integrity of the building. These include foundations, roof and wall structure, materials used, insulation, vapor retarder, attic and crawlspace ventilation, and general condition of interiors.
- 12 Mechanical M & R:** Deficiencies in plumbing, heating, ventilation, air conditioning, or medical air systems.

- 13 Electrical M & R:** Deficiencies with electrical generating, distribution, fire alarm, and communications systems.
- 14 Utilities M & R:** Deficiencies with the utilities hook-ups, systems, and distribution.
- 15 Grounds M & R:** Deficiencies with the civil site issues, drainage, access, etc.
- 16 Painting M & R:** Deficiencies of painting, exterior, interior, trim and soffit.
- 17 Roof M & R:** Deficiencies in roofing, and related systems including openings.
- 18 Seismic Mitigation:** Deficiencies in seismic structural items or other related issues to seismic design including material improperly anchored to withstand seismic effect.

B. Photographs:

We have provided photographs attached which are noted to describe the various deficiencies described in the narratives and itemized in the summary below. The photos do not cover all deficiencies and are intended to provide a visual reference to persons viewing the report who are not familiar with the facility.

We have included additional photos as Appendix B for general reference. These are intended to add additional information to the specific deficiencies listed and to provide general background information.

C. Cost Estimate General Provisions

1. New Clinic Construction

- **Base Cost**

The Base Cost provided in Section VI of this report is the direct cost of construction, inclusive of general requirements (described below) and contingency for design unknowns (an estimating contingency). The base cost is exclusive of overhead and profit, mark-ups, area cost factors and contingencies. Material costs for the project are all calculated FOB Anchorage and labor rates are based on Davis Bacon wages, regionally adjusted to Anchorage. Transportation costs, freight, Per Diem and similar costs are included in the base costs. The Project Factors and Area Cost Factor are multipliers of the base costs.

General Requirements are based on Anchorage costs without area adjustment. It is included in the Base Cost for New Clinics. These costs are indirect construction cost not specifically identifiable to individual line items. It consists of supervision, materials control, submittals and coordination, etc. The general requirements factor has not been adjusted for Indian Preference.

The Design Unknowns Contingency is an estimator's contingency based on the schematic nature of the information provided, the lack of any real design, and the assumption that any project will encompass related work not specifically mentioned.

- **Project Cost Factors**

- Equipment Costs for new medical equipment has been added at 17% of the cost of new floor space.
- Design Services is included at 10% to cover professional services including engineering and design.
- Construction Contingency is included at 10% of the Base Costs to cover changes encountered during construction.
- Construction Administration has been included at 8% of the Base Costs. This is for monitoring and administration of the construction contract.

- **Area Cost Factor**

The Area Cost Factor used in the cost estimates for this facility is shown in Section VI of this report. The area cost factors are taken from a recent study completed for the Denali Commission for statewide healthcare facilities. The numbers are the result of a matrix of cost variables including such items as air travel, local hire costs, room and board, freight, fire protection equipment, foundation requirements, and heating equipment as well as contractor costs such as mobilization, demobilization, overhead, profit, bonds and insurance. These parameters were reconsidered for each village, following the site visit, and were modified, if necessary.

- **Estimated Total Project Cost of New Building**

This is the total estimated cost of the project, including design services. The construction contract will be work subject to Davis Bacon wages, and assumes construction before year-end 2001. No inflation factor has been applied to this data.

2. Remodel, Renovations, and Additions

- **Base Cost**

The Base Cost provided in the specific deficiency sheets is the direct cost of construction, exclusive of overhead and profit, mark-ups, area cost factors and contingencies. Material costs for the project are all calculated FOB Anchorage and labor rates are based on Davis Bacon wages, regionally adjusted to Anchorage. Most of the deficiency items do not constitute projects of sufficient size to obtain efficiency of scale. The estimate assumes that the projects are completed either individually, or combined with other similar projects of like scope. The numbers include moderate allowances for difficulties encountered in working in occupied spaces and are based on remodeling rather than on new construction costs. Transportation costs, freight, Per Diem and similar costs are included in the base costs. The General Requirements, Design Contingency and Area Cost Factors are multipliers of the base costs.

The cost of Additions to clinics is estimated at a unit cost higher than New clinics due to the complexities of tying into the existing structures.

Medical equipment is calculated at 17% of Base Cost for additions of new space only and is included as a line item in the estimate of base costs.

- **General Requirements Factor**

General Requirements Factor is based on Anchorage costs without area adjustment. The factor is 1.20. It is multiplied by the Base Cost to get the project cost, exclusive of planning, architecture, engineering and administrative costs. This factor assumes projects include multiple deficiencies, which are then consolidated into single projects for economies of scale. The general requirements factor has not been adjusted for Indian Preference.

- **Area Cost Factor**

The Area Cost Factor used in the cost estimates for this facility is shown in Section VI of this report. The area cost factors are taken from a recent study completed for the Denali Commission for statewide healthcare facilities. The numbers are the result of a matrix of cost variables including such items as air travel, local hire costs, room and board, freight, fire protection equipment, foundation requirements, and heating equipment as well as contractor costs such as mobilization, demobilization, overhead, profit, bonds and insurance. These parameters were reconsidered for each village, following the site visit, and were modified, if necessary.

- **Contingency for Design Unknowns (Estimating Contingency)**

The Design Unknowns Contingency is an estimator's contingency based on the schematic nature of the information provided, the lack of any real design, and the assumption that any project will encompass related work not specifically mentioned. The factor used is 1.15.

- **Estimated Total Cost**

This is the total estimated bid cost for work completed under Davis Bacon wage contracts, assuming construction before year-end 2001. This is the number that is entered in the front of the deficiency form. No inflation factor has been applied to this data.

- **Project Cost Factors**

Similar to new clinics, the following project factors have been included in Section VI of this report.

- Design Services is included at 10% to cover professional services including engineering and design.
- Construction Contingency is included at 10% of the Base Costs to cover changes encountered during construction.
- Construction Administration has been included at 8% of the Base Costs. This is for monitoring and administration of the construction contract.

- **Estimated Total Project Cost of Remodel/Addition**

This is the total estimated cost of the project including design services, the construction contract cost for work completed under Davis Bacon wages and assuming construction before year-end 2001. No inflation factor has been applied to this data.

V. Summary of Existing Clinic Deficiencies

The attached sheets document the deficiencies; provide recommendations on how to make repairs or accommodate the needs and provide a cost estimate to accomplish the proposed modifications. The summary addresses individual deficiencies. If all deficiencies were to be addressed in a single construction project there would be cost efficiencies that are not reflected in this tabulation.

These sheets are reports from the Access Data Base of individual Deficiencies that are compiled on individual forms and attached for reference.

Refer to Section VI. New Clinic Analysis for a comparison of remodel/addition to new construction.

VI. New Clinic Analysis

The analysis of whether a new clinic is required is based on the Denali Commission standard of evaluation that "New Construction is viable if the cost of Repair/Renovation and Addition exceeds 75% of the cost of New Construction".

We have therefore determined the cost of a New Clinic Construction to meet the Alaska Rural Primary Care Facility (ARPCF) Space Guidelines for a size of village. We have also determined the cost of Repair/Renovation & Addition to the existing Clinic to meet the same ARPCF Space Guidelines.

A. The cost of a New Denali Commission 2000 SF Large Clinic in Scammon Bay is projected to be:

• Base Anchorage Construction Cost per s.f.		\$183
• Project Cost Factor:	@ 45%	\$ 82
Medical Equipment	17%	
Construction Contingency	10%	
Design Fees	10%	
Construction Administration	8%	
• Multiplier for Village	@ 1.70	\$186
Adjusted Cost per SF		\$451

Projected Cost of a New Clinic: 2000 s.f. X \$451 = \$902,000

B. The cost of the Repair/Renovation and Additions for the existing Clinic are projected to be:

• Code & Condition Repairs/Renovations		
Cost from Deficiency Summary		\$364,069
• Remodel/Upgrade work (See Def. Code 18)		
50% of clinic 1058 SF = 530 SF @ \$104/SF		\$ 72,602
• Additional Space Required by ARPCF (See Def. Code 01)		
○ Base Anchorage Cost		\$183
Additional Costs –		\$115
Medical Equipment	17%	
General Requirements	20%	
Estimation Contingency	15%	
○ Multiplier for Village	@ 1.70	\$210
Adjusted Cost per SF		\$508
Total Addition Cost of 800 SF @ \$508		\$406,560
• Project Cost Factor:	@ 28%	\$236,105
Construction Contingency	10%	
Construction Administration	8%	
Design Fees	10%	

Total cost of remodel/addition \$1,079,336

C. Comparison of Existing Clinic Renovation/Addition versus New Clinic:

Ratio of Renovation/Addition versus New Clinic is:

\$1,079,336 / \$902,000 = 1.20 x cost of New Clinic

Based on Denali Commission standard of evaluation; the remodel/addition costs are more than 75% of the cost of new construction. A new clinic is recommended for this community.

* Note: Village factors may have been adjusted for recent 2001 cost adjustments and may have changed from previously published data distributed to the villages.

VII. Conclusions and Recommendations

The existing Scammon Bay Clinic has served the community well for many years. Base on current ANTHC and YKHC delivery model for health care to rural Alaska, the facility is not adequate in size or in condition to meet these needs. The existing structure could be adapted for many other less clinical and medically stringent uses without extensive remodeling.

After careful review it is the recommendation of the consultant team that a new Denali Commission Medium 2000 SF Clinic be considered for Scammon Bay. The addition of approximately 940 SF of clinic space required by the current ARPCF Program Space Guidelines and the major renovation and upgrading of the existing clinic space will cost 1.20 times the cost of a new clinic. This results in the recommendation of a new clinic for this village.

We reviewed the options with the local community leaders the consensus was that the New Medium Clinic would meet the current community needs and for years to come. In addition, they agreed and provided a new clinic site adjacent to the new post office and community store and adjacent to city facilities. The new site is adjacent to all existing city utilities.

The community believes this is a good solution and will produce the best return for funds invested in a clinic that meets the needs of Scammon Bay community and is aggressively moving to assist in any way to accomplish this goal.

Appendix A: Specific Deficiencies Listings

The attached sheets represent the individual deficiencies identified for this project and the corrective action required to meet current codes and standards of construction. The deficiencies are further summarized in Section V. Summary of Existing Clinic Deficiencies.

Appendix B: General Site Photographs



Aerial from the South



Exterior from Norhtwest



Exterior from Southeast



Exterior from East



Exterior from the Southeast



Waiting Room



Structure shifting and utilidor poor



Structure shifting and lifting pads



Waiting and Circulation lobby to south



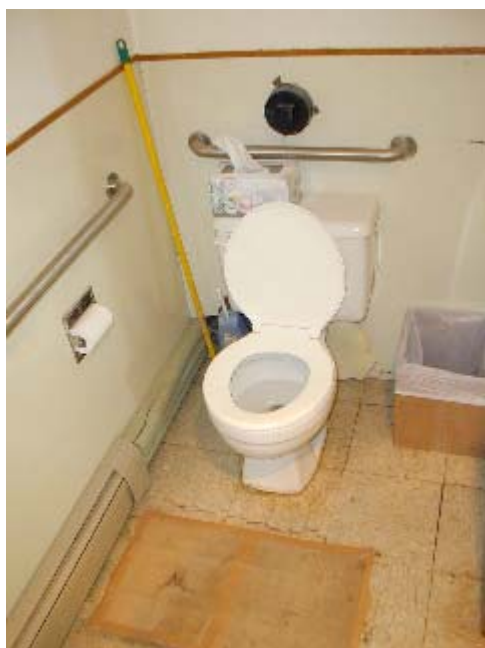
Waiting to north



Trauma/Exam Room 1



Exam Room 2



Toilet and floor deterioration



Second toilet deterioration



Office to waiting beyond



Office is quite small



Boiler



Boiler room / janitor / storage



Office to Storage



Typical toilet area



Proposed new site from southeast



Proposed new site from northeast

This Report was Prepared by
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